

Please type and sign (+) inside this box



PTO/SB/82 (10-00)

Approved for use through 10/31/2002. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REVOCATION OF POWER OF  
ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	09/522,354
Filing Date	March 9, 2000
First Named Inventor	Musselman, R.G. et al.
Group Art Unit	2784
Examiner Name	Not Yet Assigned
Attorney Docket Number	706316-1215

I hereby revoke all previous powers of attorney or authorizations of agent given in the above-identified application:

☒ A Power of Attorney or Authorization of Agent is submitted herewith.

OR

☐ Please change the correspondence address for the above-identified application to:

☐ Customer Number



Place Customer  
Number Bar Code  
Label here

OR

☐ Firm or  
Individual Name

Address

Address

City

Country

Telephone

I am the:

☐ Applicant/Inventors.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

**SIGNATURE of Applicant or Assignee of Record**

Name

Peter Chen/Vice President Of Intellectual Property, Assoc. General Counsel

Signature

*Peter Chen*

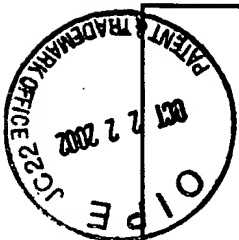
Date

*Oct. 16, 2002*

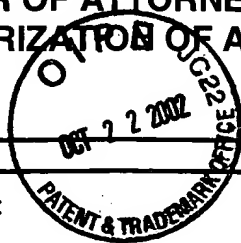
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of 3 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



# POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

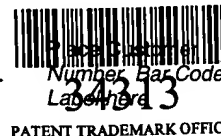


Application Number	09/522,354
Filing Date	March 9, 2000
First Named Inventor	Musselman, R.G. et al.
Group Art Unit	2784
Examiner Name	Not Yet Assigned
Attorney Docket Number	706316-1215

I hereby appoint:

☒ Practitioner at Customer Number

34313


☐ Practitioner(s) named below:

Name	Registration Number
IP E	RECEIVED
	OCT 25 2002
	Technology Center 2100

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☒ The above-mentioned Customer Number.

OR

☐ Practitioner at Customer Number

OR

Place Customer  
Number Bar Code  
Label here

☐ Firm or  
Individual Name

Address

Address

City

Country

State

ZIP

Telephone

Fax

I am the:

☐ Applicant/Inventor.

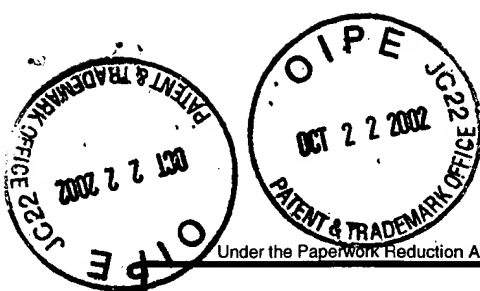
☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

## SIGNATURE of Applicant or Assignee of Record

Name	Peter Chen, Esq./Vice President Of Intellectual Property, Assoc. General Counsel
Signature	<i>Peter Chen</i>
Date	Oct. 16, 2002

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

3 \*Total of 3 forms are submitted.



**STATEMENT UNDER 37 CFR 3.73(b)**

**RECEIVED**

Applicant/Patent Owner: Quickturn Design Systems, Inc.

Application No./Patent Nos.: 09/522,354 Filed/Issue Dates: March 9, 2000

**OCT 25 2002**

Entitled: Non-Synchronous Hardware Emulator

**Technology Center 2100**

QUICKTURN DESIGN SYSTEMS, INC. a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.  
The extent (by, percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_, Frame \_\_ or for which a copy thereof is attached.

OR

- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Roy G. Musselman, Jeffrey J. Ruedinger

To: International Business Machines Corporation

The document was recorded in the United States Patent and Trademark Office at Reel 010654, Frame 0082 or for which a copy thereof is attached.

2. From: International Business Machines Corporation To Cadence Design Systems, Inc. A copy of a document evidencing this assignment is being recorded herewith . A copy of this document is attached as Exhibit 1.
3. From: Cadence Design Systems, Inc. To: Quickturn Design Systems, Inc. A copy of a document evidencing this assignment is being recorded herewith . A copy of this document is attached as Exhibit 2.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☒ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Oct. 16, 2002  
Date

Peter Chen, Esq.  
Typed or printed name  
[Signature]  
Signature

Vice President Of Intellectual Property, Assoc. General Counsel  
Title

## NOTICE OF PATENT ASSIGNMENT

This **NOTICE OF PATENT ASSIGNMENT** (the "Notice") is executed as of the date below, by **INTERNATIONAL BUSINESS MACHINES CORPORATION**, a New York corporation ("IBM").

**WHEREAS**, IBM has entered into a "Patent Assignment Agreement" (the "Agreement") with **CADENCE DESIGN SYSTEMS, INC.**, a Delaware corporation ("CADENCE"), dated February 27, 2002 ("Effective Date"), pursuant to which IBM has agreed to, among other things, assign to CADENCE certain United States patents.

**WHEREAS**, IBM and CADENCE wish to evidence the assignment of such patent rights made in the Agreement with this document.

NOW, THEREFORE, for good and valuable consideration, IBM agrees as follows:

### **ARTICLE I IBM PATENTS**

"IBM Patents" shall mean the patent applications listed in Attachment A.

### **ARTICLE II ASSIGNMENTS**

Effective on the Effective Date, and subject to the terms and conditions of the Agreement, including certain reserved rights, IBM has assigned, transferred and conveyed to CADENCE all of IBM's right, title and interest in the IBM Patents.

**IN WITNESS WHEREOF**, IBM has caused this Notice to be executed.

**INTERNATIONAL BUSINESS MACHINES CORPORATION**

By: 

Gerald Rosenthal

Vice President, Intellectual Property and Licensing

Date: March 8, 2002

**ATTACHMENT A TO IBM PATENT ASSIGNMENT ACKNOWLEDGEMENT**

09/655,596

09/656,541

09/193,733

09/523,053

09/656,146

09/373,125

09/655,595

09/656,147

09/796,055

09/522,354

## ASSIGNMENT OF PATENT APPLICATIONS

Whereas, CADENCE DESIGN SYSTEMS, INC., a corporation organized and existing under and by virtue of the laws of the Delaware and having its place of business at 2655 Seely Avenue, San Jose, California 94134 ("CADENCE"), owns of all right, title and interest in the inventions claimed and/or disclosed in following United States Patent Applications ("the Patent Applications"):

Patent Application Number	Date Patent Application Filed	Inventors	Title
09/655,596	09-06-00	Beausoleil, W.F., et al	High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with a Method to Allow Memory Read/Writes Without Interrupting the Emulation
09/656,541	09-06-00	Beausoleil, W.F., et al	High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with a Method to High Speed Bulk Read/Write Operation Synchronous DRAM While Refreshing the Memory
09/193,733	11-17-98	Ruedinger, J.	Algorithm to Separate Clock Domains for Emulation Purposes
09/523,053	03-10-00	Ruedinger, J., et al	Methods to Improve Concurrent Behavior Modeling with Emulation
09/656,146	09-06-00	Beausoleil, W.F., et al	High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with

			Improved Multiplexed Data Memory
09/373,125	08-12-99	Beausoleil, W.F., et al	Clustered Processors in an Emulation Engine
09/655,595	09/06/00	Beausoleil, W.F., et al	High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with an Improved Board-to-Board Interconnection Cable
09/656,147	09/06/00	Beausoleil, W.F., et al	High Speed Software Driven Emulator Comprised of a Plurality of Emulation Processors with an Improved Maintenance Bus that Streams Data
09/796,055	02-28-00	Beausoleil, W.F., et al	High Bandwidth 3D Memory Packaging Technique
09/522,354	03-09-00	Musselman, R., et al	Non-synchronous Hardware Emulator

Whereas QUICKTURN DESIGN SYSTEMS, INC., a corporation organized and existing under and by virtue of the laws of the Delaware and having its place of business at 2655 Seely Avenue, San Jose, California 94134 ("QUICKTURN"), is desirous of acquiring the entire right, title and interest in the inventions claimed and/or disclosed in the Patent Applications;

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, CADENCE hereby sells, assigns, transfers and sets over unto QUICKTURN, its successors and assigns, the full and exclusive right, title and interest to the inventions claimed and/or disclosed in the Patent Applications and to all Letters Patent or application or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the inventions claimed and/or disclosed in the Patent Applications, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under the International Convention; the Patents to be held and enjoyed by QUICKTURN for its own use and behalf, and for QUICKTURN'S legal

